

CLAIMS

What is claimed is:

- 1 1. A patio awning lock mechanism comprising:
2 a roller tube assembly; and
3 a weather shield provided over at least a portion of the roller tube
4 assembly;
5 wherein the weather shield is selectively engageable with the roller tube
6 assembly to prevent rotation of the roller tube assembly.
- 1 2. The patio awning lock mechanism of claim 1, further comprising a disk
2 gear coupled to the roller tube assembly.
- 1 3. The patio awning lock mechanism of claim 2, further comprising a disk
2 gear catch coupled to the weather shield and selectively engageable with the
3 disk gear to prevent rotation of the roller tube assembly.
- 1 4. The patio awning lock mechanism of claim 1, further comprising a pivot
2 bracket rotatably coupled to the weather shield.
- 1 5. The patio awning lock mechanism of claim 4, wherein the pivot bracket
2 has an angular shape with first and second mounting apertures located at
3 opposing ends of the pivot bracket.
- 1 6. The patio awning lock mechanism of claim 4, further comprising a pivot
2 rod to rotatably couple the pivot bracket to the weather shield.
- 1 7. The patio awning lock mechanism of claim 4, wherein the pivot bracket is
2 coupled to a support arm in a non-rotatable manner.

1 8. The patio awning lock mechanism of claim 4, wherein the pivot bracket is
2 coupled to the roller tube assembly in a non-rotatable manner.

1 9. The patio awning lock mechanism of claim 1, further comprising an end
2 cap provided on an end portion of the roller tube assembly, the end cap having a
3 projection that abuts with a disk gear.

1 10. The patio awning lock mechanism of claim 9, wherein the disk gear is
2 integrally formed with the end cap.

1 11. The patio awning lock mechanism of claim 1, further comprising a disk
2 gear having a plurality of circumferentially spaced teeth about a periphery of the
3 disk gear such that a disk gear catch can engage the disk gear at one or more
4 stops formed between the circumferentially spaced teeth.

1 12. The patio awning lock mechanism of claim 11, wherein the disk gear catch
2 includes a straight portion to engage the disk gear and an arcuate portion that
3 corresponds with a curvature of the weather shield such that the disk gear catch
4 can be secured to the weather shield.

1 13. The patio awning lock mechanism of claim 1, further comprising a spring
2 to bias the lock mechanism into a locked position.

1 14. The patio awning lock mechanism of claim 1, wherein the weather shield
2 includes a lip portion to facilitate grasping and pivoting of the weather shield.

1 15. A patio awning lock mechanism comprising:
2 a pair of support arms;
3 a roller located between top ends of the support arms;

4 a weather shield provided over a portion of the roller; and
5 a pivot bracket having an angular shape, wherein a first portion of the
6 pivot bracket is rotatably coupled to the weather shield and a second portion of
7 the pivot bracket is fixably coupled to one of the support arms.

1 16. The patio awning lock mechanism of claim 15, further comprising a disk
2 gear provided between the pivot bracket and the roller.

1 17. The patio awning lock mechanism of claim 16, further comprising a disk
2 gear catch secured to the weather shield and operable to engage the disk gear.

1 18. The patio awning lock mechanism of claim 15, further comprising a torsion
2 spring to bias the pivot bracket and weather shield into a locked position.

1 19. The patio awning lock mechanism of claim 15, wherein the weather shield
2 includes a lip portion to facilitate grasping and pivoting of the weather shield by a
3 user.

1 20. A patio awning lock mechanism comprising:
2 a roller;
3 a weather shield provided over a portion of the roller;
4 lock means coupled to the roller and operable to rotate with the roller; and
5 engaging means coupled to the weather shield and operable to engage the lock
6 means to retain a patio awning in a retracted or extended position.